CVP/SWP TUCP Orders by Date And Names of Modified Objectives	Authorized Modifications	Approved Objective 2006 WQCP for the San Francisco Bay/Sacramento-San
(targeted beneficial use)		<u>Joaquin Delta Estuary</u>
1/31/2014 (p. 13, expires 7/30/14)		
DELTA OUTFLOW (fish and wildlife)	February	February – June
	Minimum NDOI = 3,000 cfs, monthly average	Minimum NDOI = 7,100 CFS or 2.64 mmohs/cm at Collinsville, see map. Plus required salinity days in Table 3 footnote 11, and Table 4.
EXPORT LIMITS (fish and wildlife)	February	February
	1,500 cfs maximum rate at pumping plants	45% Delta Inflow can be diverted through CVP/SWP see footnote 22 of WQCP for specific February percentage in drought years.
DELTA CROSS CHANNEL GATE	OPEN through May 20 pending advice from fisheries	CLOSED Feb – May 20
(fish and wildlife)	agencies	
2/7/2014 (p. 13, expires 7/30/14)	\sqrt{\sqrt{\chi}}	
EXPORT LIMITS (fish and wildlife)	February 1,500 cfs maximum rate at pumping plants when Delta Outflow requirement is not met and DCC is open.	February 45% Delta Inflow can be diverted through CVP/SWP, see footnote 22 of WQCP for specific February percentage in drought years.
	Authorizes diverting up to 45% of natural, abandoned, or transferred Delta Inflow after precipitation events if original NDOI is met (or salinity at Collinsville) and DCC is closed.	
DELTA OUTFLOW AND DELTA CROSS CHANNEL GATE	All provisions remain in effect.	
2/28/2014 (p. 13, expires 7/30/14)		
DELTA OUTFLOW	February and March	February – June

(fish and wildlife)	Minimum NDOI = 3,000 cfs, monthly average	Minimum NDOI = 7,100 CFS or 2.65 mmohs/cm at Collinsville, see map. Plus required salinity days in Table 4, footnote 11.
<u>3/18/2014</u> (p. 7, expires 7/30/14)		
EXPORT LIMITS (fish and wildlife)	February and March	Feb to June
	1,500 cfs maximum rate at pumping plants when Delta Outflow requirement is not met and DCC is open.	35% Delta Inflow can be diverted through CVP/SWP
	Authorizes diverting up to 35% of natural, abandoned, or transferred Delta Inflow after precipitation events if original NDOI is met (or salinity at Collinsville) and DCC is closed. Eliminates required salinity days in the Delta Outflow Objective (see Table 4 footnotes 11 WQCP).	
4/9/2014 (p. 8, expires 7/30/14)	4	
DELTA OUTFLOW (fish and wildlife)	February, March, and April	February – June
	same as previous Orders, extended to April	Minimum NDOI = 7,100 CFS or 2.65 mmohs/cm at Collinsville, see map. Plus required salinity days in Table 4, footnote 11.
EXPORT LIMITS (fish and wildlife)	February, March, and April	Feb to June
(.isi: siis viidiiis)	same as previous Orders, extended to April	35% Delta Inflow can be diverted through CVP/SWP
4/11/2014 (p.7, expires 7/30/14)		
RIVER FLOWS – San Joaquin River (fish and wildlife)	April 11 – April 14 Minimum flows of 700 cfs	February to April 14 Minimum flows of 710 - 1,140 CFS
(fish migration)	Start and end dates of 31-day spring pulse flow period will be determined in consultation with NMFS and FWS 16 days at 3,300 cfs	April 15 – May 15 pulse flow (31 days) 3,100 – 3,540 CFS in San Joaquin River at Vernalis
	10 days at 3,500 dis	3,100 3,040 Cr 3 iii Jaii Joaquiii Miver at veritalis

	15 days at 1,500 cfs	
	End of pulse flow to May 31 Minimum flow of 500 cfs	May 16 - June Minimum flows of 710 -1,140 CFS
	June flows shall be maintained to meet applicable NMFS Biological Opinion requirements, dissolved oxygen requirements on the Stanislaus River at Ripon (Fourth Edition Central Valley Regional Water Quality Control Board's Water Quality Conrol Plan for the Sacramento and San Joaquin River Basins) and salinity requirements at Vernalis on the San Joaquin River (Water Quality Objectives for Agricultural Beneficial Uses).	May 16 - June Minimum flows of 710 -1,140 CFS
4/18/2014 (p. 7, expires 7/30/14)		
EXPORT LIMITS (fish and wildlife)	April through May San Joaquin River spring pulse flow period	Feb to June
	Up to 100 percent of the 3-day running average of San Joaquin River flows at Vernalis or 1,500 cfs, whichever is greater when the Delta Outflow requirement in footnote 11 of Table 3 in WQCP is not being met as described in the 3/18/14 order.	35% Delta Inflow can be diverted through CVP/SWP
5/2/2014 (p. 12, expires 1/27/15)		
DELTA OUTFLOW (fish and wildlife)	February, March, April, May and July Minimum NDOI = 3,000 cfs monthly average 7-day running average cannot be less than 1,000 cfs below the monthly average	February – June Minimum NDOI = 7,100 CFS or 2.65 mmohs/cm at Collinsville, see map. Plus required salinity days in Table 4, footnote 11.
SAC RIV SALINITY (agriculture/irrigation)	Compliance location on Sacramento River is moved from Emmaton four miles upstream to Threemile Slough	April 1 – August 15 EC at Emmaton 2.78 mmhos/cm
RIVER FLOWS - SAC RIVER	September – November minimum flows	September & October minimum flows

(fish and wildlife)	2,000 cfs monthly average, 7-day running average must not be less than 1,500 cfs.	3,000 cfs monthy average November – December 3,500 cfs monthly average
EXPORT LIMITS (fish and wildlife)	May 2, 2014 – January 27, 2015 1,500 cfs maximum rate at pumping plants when Delta Outflow, Sac River flow and EC, and DCC requirement are not met. Up to 100 percent of the 3-day running average of San Joaquin River flows at Vernalis or 1,500 cfs, whichever is greater, provided DWR and Reclamation are complying	Feb to June 35% Delta Inflow can be diverted by CVP/SWP July – January 65% Delta Inflow can be diverted by CVP/SWP
	with D-1641 requirements as modified by this Order.	
10/07/2014 (p. 10, expires 1/27/15)		
RIVER FLOWS — SJR Fall Pulse Flow (fish and wildlife)	31-day pulse flow spanning October - November 800 cfs monthly average at Vernalis	October, 31-day pulse flow 1,000 cfs monthly average at Vernalis
02/03/2015 (p. 21 expires 3/31/15)	· ·	
DELTA OUTFLOWS (fish and wildlife)	February - March	February – June
	Minimum NDOI = 4,000 cfs, monthly average; 7-day running average cannot be less than 1,000 cfs below the monthly average.	Minimum NDOI = 7,100 CFS or 2.65 mmohs/cm at Collinsville, see map. Plus required salinity days in Table 4, footnote 11.
RIVER FLOWS — SJR MIN FLOW (fish and wildlife)	February – March flows at Vernalis 500 cfs minimum monthly average	February – April 14 flow at Vernalis 710 – 1,140 cfs minimum monthly average
DCC GATE CLOSURE (fish and wildlife)	February – March OPEN and subject to closure gate triggers identified in 2014 Drought Operations Plan	Feb – May 20 CLOSED
EXPORT LIMITS	February – March	Feb to June

(fish and wildlife)	Exports greater than 1,500 cfs and up to the original standard are authorized after precipitation events that allow DCC to be closed and Delta Outflow above 7,100 cfs (or 2.64 mmhos/cm) but the additional requirements outlined in Table 4 are not being met, provided those diversions are limited to natural and abandoned flows. 1,500 cfs maximum rate at pumping plants when Delta Outflow was between 4,000 cfs and 7,100 cfs and DCC is open. Original export rates apply when full compliance with Delta Outflow and DCC requirements are achieved.	35% Delta Inflow can be diverted by CVP/SWP 45% of Delta Inflow can be diverted in February of critically dry years (see Table 3, footnote 22).
03/05/2015 (p. 29 expires 3/31/15) EXPORT LIMITS (fish and wildlife)	February – March Prior modifications carried forward plus the following: 3,500 cfs maximum pumping rate is authorized when Delta Outflow is between 5,500 cfs and 7,100 cfs and DCC requirements are NOT being met IF DWR or Reclamation can show they need water to meet minimum health and safety needs of their contractors.	Feb to June 35% Delta Inflow can be diverted by CVP/SWP 45% of Delta Inflow can be diverted in February of critically dry years.
04/06/2015 (p. 37 expires 6/30/15) DELTA OUTFLOW (fish and wildlife) RIVER FLOWS – SJR SPRING PULSE (fish and wildlife)	February to June All prior modifications remain. The time period was extended to include April, May, and June. March 25 – April 25, 2015 pulse flow (31 days) 710 cfs in San Joaquin River at Vernalis and comply with NMFS flow schedule in BO	February – June Minimum NDOI = 7,100 CFS or 2.65 mmohs/cm at Collinsville, see map. Plus required salinity days in Table 4, footnote 11 April 15 – May 15 pulse flow (31 days) 3,100 – 3,550 CFS in San Joaquin River at Vernalis

RIVER FLOWS – SJR MINIMUM (fish and wildlife)	April 26 – May 31 minimum flow rate 300 cfs, with the 7-day running average no less than 20% below 300 cfs.	May 16 - June Minimum flows of 710 -1,140 CFS
	June 200 cfs, with the 7-day running average no less than 20% below 200 cfs.	
SACRAMENTO RIVER SALINITY (agriculture/irrigation)	April, May, and June Compliance location on Sacramento River is moved from Emmaton four miles upstream to Threemile Slough	April 1 – August 15 EC at Emmaton 2.78 mmhos/cm
DCC GATE CLOSURE (fish and wildlife)	April 1 – May 20 OPEN and subject to closure gate triggers identified in 2014 Drought Operations Plan	Feb – May 20 CLOSED
EXPORT LIMITS (fish and wildlife)	April, May, and June All former changes carried forward with the following modification: 3,500 cfs maximum pumping rate is authorized (when Delta outflow is between 5,500 cfs and 7,100 cfs) for purposes other than health and safety, however health and safety needs must be met first and the State Water Board and the fisheries agencies must agree that the increase in the export rate can be implemented without causing unreasonable harm to fish or wildlife.	Feb to June 35% Delta Inflow can be diverted by CVP/SWP 45% of Delta Inflow can be diverted in February of critically dry years.
July 3, 2015 (p. 26 expires 12/30/15) DELTA OUTFLOW (fish and wildlife)	July 3,000 CFS, on a monthly average. The 7-day running average shall be no less than 1,000 cfs below the monthly average.	July 4,000 cfs monthly average
RIVER FLOWS – SAC R MINIMUM (fish and wildlife)	September, October, November 2,500 cfs monthly average. The 7-day running average shall be no less than 2,000 cfs below the monthly average.	September & October minimum flows 3,000 cfs monthy average November – December

		3,500 cfs monthly average
SACRAMENTO RIVER SALINITY (agriculture/irrigation)	July 3, 2015 – August 15, 2015 Compliance location on Sacramento River is moved from Emmaton four miles upstream to Threemile Slough	April 1 – August 15 EC at Emmaton 2.78 mmhos/cm
EXPORT LIMITS (fish and wildlife)	July 3, 2015 – November 30, 2015 Exports limited to 1,500 cfs combined CVP/SWP pumping rate when Delta outflow, Rio Vista flow, and Emmaton EC requirements are not being met.	Feb to June 35% Delta Inflow can be diverted by CVP/SWP 45% of Delta Inflow can be diverted in February of critically dry years.
	Original export limits apply if precipitation events occur that enable DWR and Reclamation to fully comply with Delta outflow, Rio Vista flow, and Emmaton EC requirements, except that any SWP and CVP exports greater than 1,500 cfs shall be limited to natural or abandoned flow, or transfers.	